

ABSTRACT OF THE INVENTION

When a resistance value of a CAN bus main line is 60 Ω , the CAN bus main line is in a normal state. However, the resistance value thereof differs depending on an abnormality portion when an abnormality such as disconnection, short circuit, or the like has occurred in it or a branch line. Therefore, the abnormality portion can be identified depending on the measured resistance value.

In addition, a failure diagnosis portion of an ECU stores different diagnosis trouble codes in the memory for the following cases; when an abnormality has occurred in the CAN bus communication, when various sensors are malfunctioning, and when an abnormality such as disconnection has occurred in a communication line that is connected to the various sensors. Accordingly, the resistance value of the CAN bus main line is measured, and the abnormality portion can be identified by a combination of the resistance value and the diagnosis trouble code.